

ABSTRACT OF THE DISCLOSURE

A polynucleotide encoding a polypeptide which lowers the glucose side chain amount in a serotype-specific polysaccharide antigen of *Streptococcus mutans*; novel *Streptococcus mutans* strain having the above polynucleotide; an antibody specific to this *Streptococcus mutans* strain; and a method of detecting the above-described *Streptococcus mutans* strain occurring in a subject sample. According to this method, it is possible to examine the presence or absence of *Streptococcus mutans* of an untypable serotype in a subject sample to thereby specify a subject having a high risk of the onset of infective endocarditis.